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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,142	03/03/2004	George H. Forman	10007903-2	4833

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

HUFFMAN, JULIAN D

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Period for Reply

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 15 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species/invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6 March 2006.

Claims 15 and 20 specify update of an operating system of a host computer, which is solely disclosed with the magnetic embodiment of species 2.

The examiner will rejoin dependent claims 15 and 20 upon the allowance of a generic base claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Hirst et al. (U.S. 5,930,553).

Hirst et al. discloses a print cartridge (18), comprising :

a memory (19) storing readable program code having a downloadable upgrade version of program code for a host computer that is in communication with the print cartridge (column 5, lines 19-24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst in view of Bealkowski et al.

Hirst discloses everything claimed with the exception of program code for notifying a user when a partial upgrade occurs.

Bealkowski et al. discloses program code for notifying a user if an error occurs, which is equivalent to a partial upgrade (column 14, lines 32-35 and 39-41, fig. 8, if a full upgrade had occurred, there would be no errors detected).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the upgrade program of Hirst et al. to notify the user when a partial upgrade or error has occurred as suggested by Bealkowski et al. for the purpose of enabling the user to try again or call for service (column 14, lines 39-41).

6. Claims 12, 16-18, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst in view of Apple Computer, Inc.

Hirst discloses

a print cartridge (18), comprising :

a memory (19) storing readable program code having a downloadable upgrade version of program code for a host computer that is in communication with the print cartridge (column 5, lines 19-24).

Hirst also discloses a method of software execution comprising:

recognizing downloadable code stored in a print cartridge and downloading the upgrade code from the print cartridge to a host computer, sensing when the print cartridge is positioned in a printer before downloading the code from the print cartridge to the host computer, wherein the host computer provides processing capability to read and distribute the code from the cartridge to the host computer (column 5, lines 19-24 and 54-65).

Hirst et al. does not disclose program code which executes the steps of automatically determining whether the upgrade version of program code is required for the host computer and if the upgrade version is required, then downloading the upgrade version from the memory to the host computer and if the upgrade is not required, ignoring the code on the print cartridge, and determining if the code is compatible with the host computer and if the code is not compatible aborting any downloading of the code from the print cartridge to the host computer.

However, Apple Computer, Inc. discloses a memory device storing program code to upgrade software in a host computer including program code which executes the steps of automatically determining whether the upgrade version of program code is required for the host computer and if the upgrade version is required, then downloading the upgrade version from the memory to the host computer and if the upgrade is not required, ignoring the code on the print cartridge, and determining if the code is

compatible with the host computer and if the code is not compatible aborting any downloading of the code from the print cartridge to the host computer (the device checks the version of the firmware code and will only update the firmware of the appropriate devices, a device not compatible with the code or a device which has already been updated is not updated and the upgrade code is ignored).

It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate into the software of Hirst programming code executing the steps executed by the code of Apple Computer, Inc. for the purpose of preventing overwriting of program code with incompatible upgrade code which can cause device failure and preventing unnecessary upgrading which can reduce the lifetime of the device.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst in view of Apple Computer, Inc. as applied to claims 12, 16-18, 21, 23 and 24 above, and further in view of Bealkowski et al.

Hirst as modified discloses everything claimed with the exception of program code for notifying a user when a partial upgrade occurs.

Bealkowski et al. discloses program code for notifying a user if an error occurs, which is equivalent to a partial upgrade (column 14, lines 32-35 and 39-41, fig. 8, if a full upgrade had occurred, there would be no errors detected).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the upgrade program of Hirst et al. as modified to notify the user when a partial upgrade or error has occurred as suggested by Bealkowski et al. for the purpose of enabling the user to call for service (column 14, lines 39-41).

Response to Arguments

8. Applicant's arguments filed 21 November 2005 have been fully considered but they are not persuasive.

Applicant's argument that Hirst does not teach or suggest a print cartridge having an upgrade version of program code for a host computer that is in communication with the print cartridge is noted, however, the software or firmware in the image forming device satisfies this limitation. The software or firmware in the image forming device controls the operation of the cartridge and acts as a host computer.

Allowable Subject Matter

9. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose, teach or suggest a method of software execution including the steps of recognizing downloadable code stored in a print cartridge, determining if a host computer requires an upgrade, and if an update is required, downloading the code from the print cartridge to the host computer, wherein if an incompatibility exist between the code and an operating system of the host computer, then storing the code in the host computer until the incompatibility is resolved.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Julian D. Huffman
Art Unit 2853
14 March 2006